**IT Applications Unit 3, AOS 1, Online Communities**

Complete the following, from Chapter 2, Problem-solving Methodology, pgs, 60-80

**Problem Solving Methodology**

* Analyse
* Design
* Development
* Evaluate

**Case Study**

Indigenous Language Trust, (ILT)

Using the case study, ILT complete the following:

**Analysis of the problem**

This stage involves the following steps:

**Determining the Solution Requirements**

1. **What needs to be established?**

In determining the solution requirements, you need to establish what information needs to be provided, what data is needed and what functionality must be included in the website solution.

1. **How is the problem best defined?**

A problem exists when the goals of an organisation are not being met. The best way to define a problem is to write it first as a simple problem statement and then to rewrite it as a question that directs or indicates a desired course of action.

1. **The aim of problem analysis is to ensure that the problem is clear enough to effectively analyse it and efficiently solve it. Define these two terms, efficiency and effectiveness**

Efficiency refers to the speed, time, cost and effort needed to produce a solution. Effectiveness is defined by the quality, relevance, timeliness and the clarity of the solution.

1. **What type of organisation is the ILT?**

Indigenous Language Trust, ILT, is a non-for-profit community group aimed at preserving and developing Indigenous language in Australia.

1. **In your own words, define the problem for ILT**

ILT

**Identifying Data and Information needed for the solution, p 62**

**Need to identify where data is coming from for online community – inside or outside**

* 1. **In the ILT case study what is the information needed for the solution?**

ILT needs

**Identifying the functions needed for the online community solution, p 63**

The functions needed for online communities can be separated into 2 distinct categories,

* how the solution functions and
* attributes of the solution. List the characteristics of each of these.
  1. **What are the functions of the ILT website solution?**
* to broadcast information to the community about events and projects
* to exchange information between offices about projects they are working on and any challenges they are having
* to encourage community groups to exchange information in a secure environment
* to store documents containing knowledge about the organisation in a central secure environment

**Identify the constraints on the solution, p 64**

* 1. **List the technical and non-technical constraints**

Technical constraints

* the cost of the solution
* the speed or time it takes to exchange information
* the security of the solution, should it need to be open or closed?
* the number of people accessing the online community at the same time

Non-technical constraints

* issues of privacy
* copyright
* cultural, age and gender need to be considered
  1. **What are the constraints on the ILT solution?**

The constraints of the ILT solution include strict rules about the use of images of deceased Aboriginals and the use of their names on public documents.

**Determine the scope of the solution, p 66**

* 1. **What needs to be considered in the scope of the solution?**

When determining the scope of the solution, the benefits of the solution need to be considered in the terms of efficiency and effectiveness. The scope should clearly state the boundaries of the solution and what the solution can and can’t do.

* 1. **In the ILT case study list the benefits or the scope of the solution in terms of efficiency and effectiveness**

Efficiency

* the time taken to access and exchange information should be reduced
* easily exchange information
* the cost will be reduced
* the process of exchanging information takes less effort

Effectiveness

* the quality of decision making will improve
* information broadcast to the public is relevant and timely